

AMENDMENTS TO THE CLAIMS

Please amend Claim 1 as indicated below.

1. (**Currently Amended**) A liquid source chemical vaporizer for vaporizing liquid source chemical and delivering vapor phase chemical, comprising:

a container configured to hold liquid source chemical up to a liquid fill level and to additionally define an inner gas volume;

a carrier gas inlet communicating carrier gas into the container;

a gas outlet communicating with a vapor deposition reactor and the inner gas volume of the container; and

a porous element comprising at least one opening positioned to be in contact with liquid source chemical and a plurality of openings positioned to be in contact with the inner gas volume within the container.

2.-14. (**Canceled**)

15. (**Original**) The source chemical vaporizer of Claim 1, wherein the carrier gas inlet comprises a bubbler tube extending through the inner gas volume into the liquid source chemical, the porous element being the bubbler tube, whereby the inner gas volume is above the liquid fill level and communicates gas through pores in the bubbler tube.

16. (**Original**) The source chemical vaporizer of Claim 15, wherein pores in the bubbler tube are sized to produce a flow rate to the inner gas space above the liquid fill level, under normal operation, of greater than about 50 % of a flow rate of carrier gas through a bottom of the bubbler tube producing bubbles within the liquid source chemical.

17.-32. (**Canceled**)

33. (**Previously Presented**) A liquid source bubbler system, comprising:

a container configured to hold liquid source chemicals;

a bubbler tube communicating with an inert gas source, the bubbler tube extending into an opening within a liquid storage space;

a gas outlet communicating with a vapor deposition reactor and an inner gas space defined within the container above the liquid storage space; and

a by-pass conductance route through the bubbler tube configured to release excess gas pressure from within the inner gas space, thereby inhibiting liquid flow up the bubbler tube.

34.-42. (**Canceled**)

43. (**Previously Presented**) The source chemical vaporizer of Claim 1, wherein the material of the porous element is microporous.

44. (**Previously Presented**) The source chemical vaporizer of Claim 1, wherein the porous element is a porous feeding tube.

45. (**Previously Presented**) The source chemical vaporizer of Claim 44, wherein the porous feeding tube is configured such that hydrostatic pressure of a liquid column within the porous feeding tube is about equal to a pressure difference across walls of the porous feeding tube.

46. (**Previously Presented**) The source chemical vaporizer of Claim 44, wherein pores of the porous feeding tube serve as a by-pass conductance for releasing overpressure in the inner gas volume.

47. (**Previously Presented**) The source chemical vaporizer of Claim 1, wherein the porous element has a porosity between about 30% and 70%.

48. (**Previously Presented**) The source chemical vaporizer of Claim 1, wherein the porous element has a porosity between about 40% and 60%.

49. (**Previously Presented**) The source chemical vaporizer of Claim 1, wherein the porous element defines the gas flow path within a porous feeding tube having a conductance that is a linear function of a length of the tube.

Appl. No. : **10/674,651**
Filed : **September 29, 2003**

SUMMARY OF INTERVIEW

Exhibits and/or Demonstrations

None

Identification of Claims Discussed

Claims 1, 15-16, 33 and 43-49.

Identification of Prior Art Discussed

None.

Proposed Amendments

None

Principal Arguments and Other Matters

In a telephone interview on May 10, 2006, Applicant's representatives Andrew N. Merickel and Adam Gilbert and Examiner Charles S. Bushey discussed the April 27, 2006 Office Communication. Applicant's representatives argued that Claims 1, 15, 16, 33, and 43-49, as amended in the Response filed February 21, 2006, were within the scope of the elected invention and should be examined.

Results of Interview

The Examiner agreed that Claims 1, 15, 16, and 43-39 were within the scope of the elected invention. However, with respect to Claims 33 the Examiner stated that he felt Claim 33, as amended, is drawn to the species of Figure 7 rather than the elected species of Figure 6. Applicant's representatives agreed to consider the Examiner's position and file a response to the Office Communication of April 27, 2006.